

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
1 December 2005 (01.12.2005)

PCT

(10) International Publication Number
WO 2005/114000 A1

(51) International Patent Classification⁷: **F16D 37/02**

(21) International Application Number: PCT/US2004/024992

(22) International Filing Date: 3 August 2004 (03.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/493,551 11 August 2003 (11.08.2003) US

(71) Applicant (for all designated States except US): EDC AUTOMOTIVE, LLC [US/US]; 3199 Lapeer Road, Auburn Hills, MI 48326 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MOSER, George [US/US]; 1450 Stillman Road, Mason, MI 48854 (US). SOMMER, Gordon [US/US]; 831 Deer Court, Plymouth, MI 48170 (US). OSTAPOWICZ, Adam [US/US]; 33229 Barrington, Westland, MI 48186 (US).

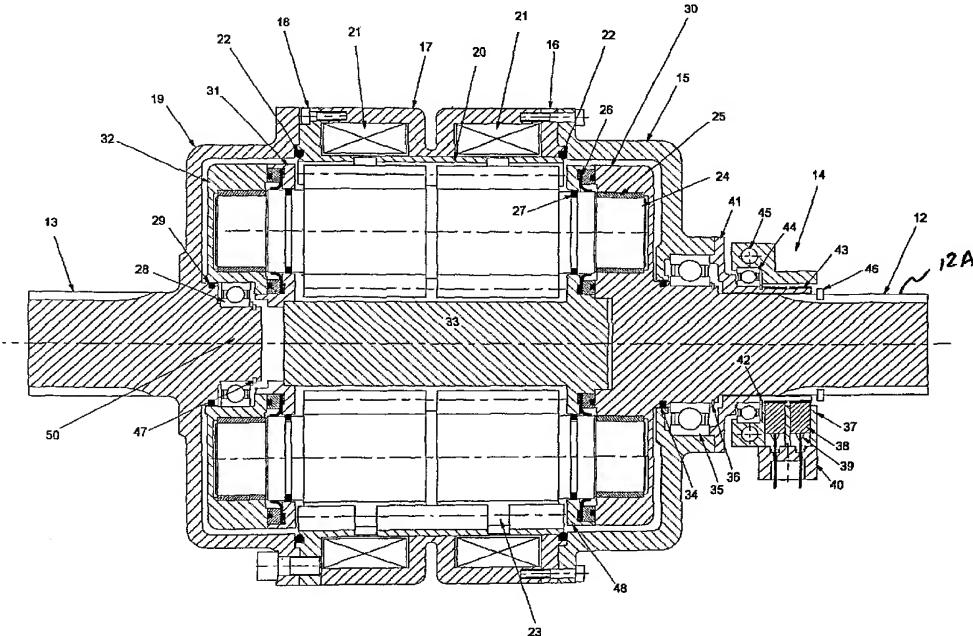
(74) Agent: OLSON, Stephen; Harness, Dickey & Pierce, P.L.C., P.O. Box 828, Bloomfield Hills, MI 48303 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: MAGNETIC TORQUE TRANSFER DEVICE



(57) Abstract: A magnetic torque transfer device. The magnetic torque transfer device includes an input member (12) and an output member (13). The input member (12) notably drives at least one input gear (24). The output member (13) drives at least one output gear (20). At least one input gear (24) has a first plurality of gear teeth meshingly engaged with a second plurality of gear teeth of at least one output gear (20). A magneto rheological fluid (64) is disposed between at least some of the meshing first and second pluralities of gear teeth.

WO 2005/114000 A1



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.